

METHOD AND DEVICE FOR RAPIDLY INDUCING AND THEN MAINTAINING
HYPOTHERMIA

ABSTRACT OF THE DISCLOSURE

5 A cooling system includes a console and a tissue cooling device such as a head-cooling device. An operator applies the head-cooling device to the head of a patient at risk for ischemic injury. The console provides a cooling fluid to a fluid circulation space located between the cooling device and the patient's head under a positive gage pressure. Direct contact between the cooling fluid and the patient's head provides a
10 relatively rapid induction of systemic hypothermia in the patient, thereby minimizing or preventing ischemic injury in the patient. The console also removes air from a channel disposed about an inner rim of the cooling device, using a negative gage pressure. Such removal of the air from the channel seals the rim of the cooling device to the head of the patient, including portions of the channel in contact with hair of the patient's head, and
15 minimizes leaking of the cooling fluid beyond the rim of the cooling device.